

CHAPTER 7

ADAPTING U.S. STRATEGIC FORCES

The Department of Defense has completed a comprehensive review of the U.S. nuclear posture. This chapter summarizes the conclusions of that review.

Nuclear forces continue to play a critical role in the defense of the United States, its allies and friends. They provide credible capabilities to deter a wide range of threats, including weapons of mass destruction and large-scale conventional military force. Nuclear capabilities possess unique properties that give the United States options to hold at risk classes of targets important to achieve strategic and political objectives.

The transformation of the nation's nuclear posture complements the transformation of America's conventional forces and capabilities. President Bush directed the Department of Defense to transform America's military forces to meet the challenges of the new century. In response to his direction, the Department of Defense used the Congressionally-mandated Quadrennial Defense Review to develop a new defense strategy and program for transforming U.S. conventional forces. Building on the strategic premises of the QDR report, the Nuclear Posture Review (NPR) offers a blueprint for transforming our strategic posture and signifies a major departure in our approach for managing strategic issues. Indeed, the findings of the NPR form the foundation for the Moscow Treaty signed by President Bush and Russian President Putin and awaiting ratification by the Senate.

The Nuclear Posture Review began with the recognition that the security situation at the start of the 21st century differs substantially from that of the early 1990s when the last Nuclear Posture Review was conducted. The end of the Cold War can no longer be considered a recent phenomenon. Russia is no longer an enemy and the collapse of the Soviet Union is now more than a decade past. At the same time, new dangers have emerged that are both less familiar and less predictable, including terrorists and rogue states intent on acquiring and using weapons of mass destruction. Unlike the former Soviet Union, their leaders are subject to few institutional restraints

on using such weapons. Their decision-making processes are obscure and behavior at times unpredictable. Their actions increase the complexity of managing international security. In this environment, the probability of surprise and ubiquity of uncertainty are dominant strategic considerations for the U.S.

Meeting the challenges of surprise and uncertainty requires a new approach to deterrence. While nuclear forces made an indispensable contribution to deterring Warsaw Pact aggression during the Cold War, a strategic posture that relies solely on offensive nuclear weapons is insufficient to support the nation's defense policy goals. The Nuclear Posture Review concluded that deterrence should not be limited to the threat of retaliation, nor rely exclusively on nuclear forces. The U.S. will need a broader range of capabilities to assure friends and foe alike of its resolve. Nuclear forces, moreover, are unsuited to many of the contingencies for which the U.S. prepares. A mix of capabilities, offensive and defensive, nuclear, and conventional is required. Such a mix will provide additional military options that are credible to enemies, reassuring to allies, and appropriate to Americans.

Following the direction laid down for U.S. defense planning in the QDR, the Nuclear Posture Review shifts the basis for strategic forces planning from specific threats to emerging capabilities that could exploit U.S. vulnerabilities or confer advantages on adversaries.

This capabilities-based approach is the foundation for transforming the U.S. nuclear posture:

- Replace the Strategic Triad of the Cold War with a New Triad that integrates conventional and nuclear offensive strategic strike capabilities, active and passive defenses, and a responsive infrastructure to provide a more diverse portfolio of capabilities against immediate, potential and unforeseen contingencies; and
- Adopt a new approach to strategic nuclear force reductions that provides the flexibility to respond to changes in the security environment and to technological surprise.

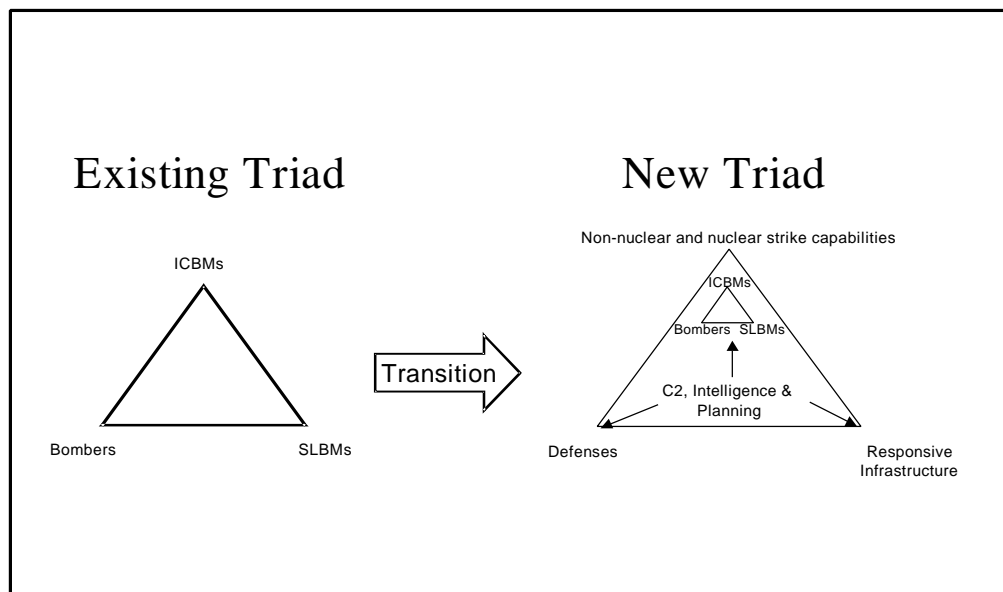
The New Triad

The application of a capabilities-based approach to U.S. nuclear forces has resulted in a decision to transform the existing triad of U.S strategic nuclear forces—intercontinental ballistic missiles (ICBMs), heavy bombers, and submarine-launched ballistic missiles (SLBMs)—into a New Triad composed of a diverse portfolio of offensive and defensive, nuclear, and conventional systems. The New Triad is designed to give the President and the Secretary of Defense a broad array of options to address a wide range of possible contingencies.

The elements of the New Triad are depicted in Figure 7.1 and summarized below:

- Strike capabilities, both non-nuclear and nuclear, and their associated command and control;
- Active and passive defenses, including the command and control for air and missile defenses; and
- Research and development (R&D) and industrial infrastructure for developing, building, and maintaining offensive forces and defensive systems.

Figure 7.1 The New Triad



The efficiency and military potential of the individual elements of the New Triad are maximized by timely and accurate intelligence, adaptive planning, and enhanced command and control. Enhancing these capabilities is critical to realizing the potential inherent in the New Triad concept.

With respect to nuclear forces, once the planned warhead reductions are completed, the New Triad will include about one-third of the operationally deployed warheads of the current strategic nuclear force. It will retain a vital role in deterring Weapons of Mass Destruction (WMD) threats, assuring allies of U.S. security commitments, holding at risk an adversary's assets and capabilities that cannot be countered through non-nuclear means, and dissuading potential adversaries from developing large-scale nuclear, biological, chemical, or conventional threats.

As other elements of the New Triad are developed and integrated, they could assume tasks now assigned exclusively to nuclear forces. Under such circumstances the required number of operationally deployed nuclear weapons might be further reduced.

Elements of the New Triad

There are six underlying elements that support the legs of the New Triad:

Strike Capabilities. Non-nuclear strike capabilities include advanced conventional weapons systems, offensive information operations, and Special Operations Forces. Deployed nuclear strike capabilities include the three legs of the existing strategic triad and theater-based, nuclear-capable dual-role aircraft. Nuclear-armed sea-launched cruise missiles, removed from ships and submarines under the 1991 Presidential Nuclear Initiative, are maintained in a reserve status.

Defenses. Active defenses include ballistic missile defense and air defense. Passive defenses include measures that reduce vulnerability through mobility, dispersal, redundancy, deception, concealment, and hardening; warn of imminent attack and support consequence management activities.

This element of the New Triad comprises defenses for the U.S. homeland, forces abroad, allies, and friends.

Infrastructure. The R&D and industrial infrastructure includes the research facilities, manufacturing capacity, and skilled personnel needed to produce, sustain, and modernize the elements of the New Triad. A responsive infrastructure that can augment U.S. military capabilities in a timely manner provides strategic depth to the New Triad.

Planning. Careful planning will be critical to integrate and balance the three elements of the New Triad. Planning for the New Triad must consider multiple goals, a spectrum of adversaries and contingencies, and the many uncertainties of the security environment.

Command and Control. A reliable, survivable, and robust command control system will serve as a critical portion of the New Triad.

Intelligence. “Exquisite” intelligence—access to an adversary’s secrets without his knowledge—is essential to provide insight into the intentions as well as the capabilities of opponents. Such intelligence should enable the United States to tailor its deterrent strategies to the greatest effect.

Creating the New Triad

Development and deployment of elements of the New Triad will require several initiatives.

Major Initiatives. Developing and sustaining the New Triad will require investment in the areas of: (1) advanced non-nuclear strike, (2) missile defenses, (3) command and control, and (4) intelligence. These investments will reinforce the nation’s strategic deterrent capabilities and contribute significantly to the improvement of the military’s operational capabilities.

Overhaul of Existing Capabilities. To meet the demands of the New Triad, an overhaul of existing capabilities is needed. This includes improving the tools used to build and execute strike plans so that the national leadership can adapt pre-planned options, or construct new options, during highly dynamic crisis situations. In addition, the technology base and production

readiness infrastructures of both DoD and the National Nuclear Security Administration must be modernized so that the United States will be able to adjust appropriately to changing situations.

Nuclear Force Reductions and System Modifications. As elements of the New Triad are deployed and the number of operationally deployed nuclear warheads is reduced, adjustments may be needed to match the capabilities of the remaining nuclear forces to new missions. The large size of the Cold War nuclear arsenal allowed planners to develop weapons optimized for specific tasks. The large number of warhead types in the arsenal served to reduce the risk that technical problems with one type of warhead would substantially reduce the capability of the force overall. For the New Triad, the reduced size of the force will require more reliable systems. In addition to the efforts needed to refurbish aging weapons in the stockpile, a need may arise to modify, upgrade or replace portions of the extant nuclear force or develop concepts for follow-on nuclear weapons systems better suited to the nation's needs. It is unlikely that a reduced version of the Cold War nuclear arsenal will be precisely the nuclear force the United States will require in 2012 and beyond.

The New Triad will take time to develop as its elements are adjusted and adapted to each other. Nuclear forces assigned to the New Triad and their command and control systems are mature, but are in need of refurbishment. Advanced non-nuclear strike capabilities are comparatively new, their operational effectiveness is still developing, and planning for their employment is still evolving. Missile defenses are beginning to emerge as systems that can have an effect on the strategic and operational calculations of potential adversaries. They are now capable of providing active defense against short- to medium-range threats. The defense and nuclear infrastructure is well established, but in many respects neither is sufficiently flexible to respond quickly to new requirements.

Sizing the Nuclear Force for Immediate, Potential and Unexpected Contingencies. In setting requirements for nuclear strike capabilities, distinctions can be made among the contingencies for which the United States must be prepared. Contingencies can be categorized as immediate, potential, or unexpected.

Immediate Contingencies involve well-recognized, current dangers. During the Cold War, Soviet threats to the United States and Western Europe represented the immediate contingency for which U.S. nuclear forces were primarily prepared. Current examples of immediate contingencies include an attack using WMD on U.S. forces or a key friend or ally in the Middle East or Asia.

Potential Contingencies are plausible, but not immediate, dangers. They are contingencies which the U.S. leadership can anticipate and about which it has received timely warning. For example, the emergence of a new, hostile military coalition against the United States or its allies in which one or more members possess WMD and the means of delivery is a potential contingency that could have major consequences for U.S. defense planning. The re-emergence of a hostile peer competitor is another example of a potential contingency.

Unexpected Contingencies are sudden and unpredicted security challenges. They could occur in the near term or well into the future. Contemporary illustrations might include a sudden regime change by which an existing nuclear arsenal comes into the hands of a new, hostile leadership group or an adversary's surprise acquisition of WMD capabilities.

The operationally deployed forces are sized to provide the capabilities required to meet U.S. defense goals in the context of immediate and unexpected contingencies. That is, a sufficient number of forces must be available on short notice to counter known threats while preserving a small, additional margin in the event of a surprise development. The United States plans to reduce its operationally deployed nuclear forces over the next decade to 1,700 to 2,200 warheads, while maintaining the flexibility necessary to accommodate changes in the security environment that could affect U.S. nuclear requirements. This reduction will provide a credible deterrent at the lowest possible number of nuclear weapons consistent with national security requirements and alliance obligations.

The United States will also maintain an ability to augment the operationally deployed force to meet unanticipated or surprising potential contingencies. This augmentation would be accomplished by moving the required number of individual warheads from storage to an operational unit. This capability

is also an important tool to assure allies and friends and dissuade potential competitors. It will allow the United States to augment its operational forces over weeks, months and years to meet any potential contingencies. Depending on the time available, the United States could also pursue diplomatic, political, and economic measures to improve conditions. Additionally, it could choose to improve other elements of the New Triad.

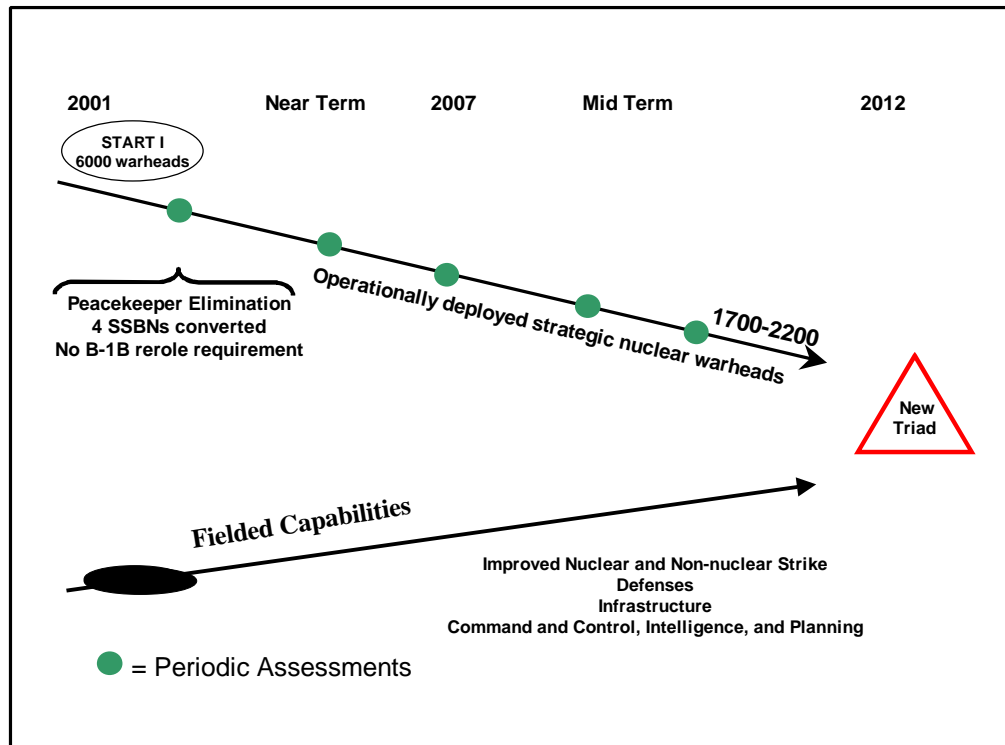
Adopting a New Approach to Strategic Force Reductions

Figure 7.2 depicts the Department's approach toward reductions in strategic nuclear arms. The objective is an operationally deployed strategic nuclear force with 1700 to 2200 operationally deployed strategic nuclear warheads by 2012. Reductions are planned through a phased program beginning in FY 2002 that eliminates Peacekeeper ICBMs, removes 4 Trident SSBNs from strategic service, and downloads weapons from Trident SLBMs, Minuteman III ICBMs, and B-52H and B-2 bombers.

The precise method of achieving the reductions will be determined in the course of the periodic reviews the Department will conduct. The periodic reviews will:

- Review the progress to date in the reduction schedule;
- Evaluate existing assumptions regarding the risks facing U.S. national interests for the next one to three years and the role of nuclear forces in meeting those risks; and
- Review the progress made in the development of the New Triad and the capability of non-nuclear forces, defenses, intelligence, command and control, and the defense infrastructure to meet emerging risks.

Figure 7.2 Path for Nuclear Reductions



Note: The downward arrow illustrates a trend. U.S. reductions are unlikely to occur in a linear fashion.

As the President's announced reductions are implemented, the existing verification regime established by the first Strategic Arms Reduction Treaty (START I) that entered into force December 5, 1994 will remain in effect. The START I Treaty includes provisions that provide a useful baseline of transparency for offensive strategic forces. The U.S. will assess options for additional transparency and confidence-building options in the context of the new strategic relationship with Russia. In this regard, President Putin has announced that the Russian Federation also will reduce nuclear forces in line with its requirements. The United States will continue consultations with the Russian Federation on how to achieve increased transparency and predictability regarding reductions in offensive nuclear forces.

The U.S. Senate did not provide its advice and consent to the Comprehensive Test Ban Treaty (CTBT). The Administration does not support ratification of the CTBT but continues to support observance of the

U.S. testing moratorium. The U.S. test readiness posture under a moratorium is an important aspect of the U.S. infrastructure. The Department of Defense is working with the Department of Energy to determine the appropriate test readiness standard that exercises the range of skills necessary to sustain this readiness posture and to be able to respond appropriately to unforeseen problems with the nuclear stockpile.

In sum, the U.S. strategy for its strategic forces will be transformed and adapted to meet the challenges of the decades to come. The risks associated with reductions in deployed nuclear warheads will be offset by the development and fielding of non-nuclear offensive and defensive capabilities and a revitalization of the infrastructure. The new strategy puts aside Cold War practices and planning and represents an important step in defense transformation.